The present invention relates to a transplantation material produced by dissociation of porcine tissue and removal of macrophages and/or microglial cells therefrom. The tissue could be an embryonic or fetal neural tissue and the removal could be effected by exposing the preparation above to antibodies against the $\mbox{Gal}\alpha\mbox{l-3}\mbox{Gal}\beta\mbox{l-R}$ epitope and a complement reagent. invention also relates to the use of such a transplantation material for preparing a pharmaceutical preparation useful when transplanting neural tissue. The invention also relates to a kit comprising one or more enzymes for tissue dissociation, an antibody preparation and a complement reagent. The invention also relates to a process for removal of macrophages and/or microglial cells from porcine embryonic or fetal neural tissue. Finally, the invention relates to a process for treatment of neurological disorders with such pretreated porcine neural grafts.